AMENDMENTS TO THE SPECIFICATION

Please replace paragraph [0052] with the following rewritten paragraph [0052]:

[0052] (Second Embodiment)

Fig. 5 shows a view showing an information processing device that performs CPU operating frequency control according to a second embodiment of the invention. Referring to the drawing, the configuration including the CPU 1 and the memory device 2 is the same as the first embodiment. Also, like the program 10 of the first embodiment, a program 20 includes respective processings performed by an information processing apparatus ~~51~~52 written in the form of programs for the information processing apparatus 52. The operating frequency of the CPU 1 is changed by a CPU operating frequency setting portion 207 in an OS 200.

Please replace paragraph [0056] with the following rewritten paragraph [0056]:

[0056] As with the program execution time ~~adjustment~~ determining portion 103 in the first embodiment, the program execution time determining portion 203 determines execution times of the programs in such a manner that a sum of the necessary processing volumes of the programs for each regular time becomes as equal as possible on the basis of the requests for the execution times, the allowable ranges and the necessary processing volumes of the programs.

Please replace paragraph [0061] with the following rewritten paragraph [0061]:

[0061] The program execution portion 208 executes the individual programs #1, #2, and so forth included in the program 20 at the execution times determined by the program execution time determining portion 203, using the CPU 1 that operates at the operating frequency set by the CPU operating frequency setting portion 207. However, when the interrupted execution time adjustment portion 206 determines the program execution times again, the program execution portion 208 executes the program ~~10~~20 at the

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execution times determined again. In short, the program execution portion 208 executes the program ~~10~~20 according to the latest determination by taking the occurrence of an interrupt into account.

Please replace paragraph [0065] with the following rewritten paragraph [0065]:

[0065] Step S6-12 through Step S6-14 are the flow of processings performed by the CPU operating frequency <u>setting portion</u> 207 and the program execution portion 208. Step S6-12 is the step of notifying the program execution times and the necessary processing volumes in the case of Step S6-8 (when the interrupt does not occur) or in S6-11 (when the interrupt occurs), and Step S6-13 and Step S6-14 are performed when Step S6-12 is performed. Step S6-13 is the step performed by the CPU operating frequency setting portion 207 to determine the CPU operating frequency on the basis of the notified necessary processing volumes. Also, in Step S6-14, the program execution portion 208 executes the program 20 at the execution times determined in Step S6-8 or Step S6-11.

Please replace paragraph [0082] with the following rewritten paragraph [0082]:

[0082] Fig. 9 is a flowchart detailing the flow of processings in this embodiment. In Step S9-1, the task management portion 310 loads tasks to be executed by the information processing device 53 into the memory device 2, for example, from the ROM or the like descried above to be registered therein, for example, by manipulations of the user on the manipulation portion 3. In subsequent Step S9-2, the task management portion 310 registers requests for execution times and allowable ranges of the task 30 thus registered into the task execution time registration portion 301. In Step S9-3, the task execution time registration portion 301 notifies the task scheduling portion ~~103~~303 of the requests for the execution times and the allowable ranges thus registered.

Please replace paragraph [0083] with the following rewritten paragraph [0083]:

[0083] In Step S9-4, the task processing volume detection portion 302 detects processing volumes necessary for the tasks requested to be executed. As has been described, in Step S9-4, the necessary processing volumes are detected, for example, by calling out the functions from the tasks or by waiting for the program to be executed actually to measure the necessary processing volumes actually. In Step S9-5, the task processing volume detection portion ~~102~~302 notifies the task scheduling portion 303 of the necessary processing volumes of the tasks thus detected. In the flowchart of Fig. 9, the registration and the notification of the requests for the times and the allowable ranges (S9-2 and S9-3) are performed before the detection and the notification of the necessary processing volumes (S9-4 and S9-5). However, these steps are not necessarily performed in this order. Because these steps are independent, they can be performed in arbitrary order.

Please replace paragraph [0101] with the following rewritten paragraph [0101]:

[0101] The OS 400 performs the CPU clock control of this embodiment, and therefore includes a task management portion 410, a timer event management portion 420, a task execution time registration portion 401, a task execution time request interpretation portion 402, a task processing volume detection portion 403, a timer event processing volume detection portion 404, a timer event registration portion 405, a timer event ~~adjustment~~ determining portion 406, a CPU operating frequency setting portion 407, a timer event execution portion 408, and a task execution portion 409. In this embodiment, the task management portion 410, the timer event management portion 420, the task execution time registration portion 401, the task execution time request interpretation portion 402, the task processing volume detection portion 403, the timer event processing volume detection portion 404, the timer event registration portion 405, the timer event ~~adjustment~~ determining portion 406, the CPU operating frequency setting portion 407, the timer event execution portion 408, the task execution portion 409, and the CPU 1 have the capabilities to operate as a CPU clock control device 14.

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Please replace paragraph [0113] with the following rewritten paragraph [0113]:

[0113] Fig. 12 is a flowchart detailing operations of the CPU clock control device of this embodiment. Step S12-1 through Step ~~S12-5~~ S12-3 show the flow of processings by the task management portion 410, the task execution time registration portion 401, the task execution time request interpretation portion 402, and the task processing volume detection portion 403. Step S12-6 and Step ~~S12-7~~ S12-13 show the flow of processings by the timer event management portion 420, the timer event registration portion 405, the timer event determining portion 406, the CPU operating frequency setting portion 407, and the timer event execution portion 408.

Please replace paragraph [0114] with the following rewritten paragraph [0114]:

[0114] In Step S12-1, the task 40 to be executed by the information processing apparatus 54 is loaded in the memory device 2 to be registered therein, for example, from the ROM or the like as described above, for example, by manipulation of the user on the manipulation ~~portion 4~~ portion 3. In Step S12-2, the task management portion 410 registers the requests for the execution times and the allowable ranges of the registered task 40 in the task execution time registration portion 401. In Step S12-3, the task execution time request interpretation portion 402 determines the timer event 41 that controls the task 40 in such a manner that the requests for the execution times and the allowable ranges of the task 40 registered in the task execution time registration portion 401 are met as well as the requests for the execution times and allowable ranges of the timer event 41.

Please replace paragraph [0117] with the following rewritten paragraph [0117]:

[0117] In Step S12-8, the timer event management portion 420 refers to the management table 421 to judge whether the timer event requested to be registered in the timer event registration portion 405 wakes up the task. When the result shows that the timer event requested to be registered wakes up the task, the timer event registration portion 405

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receives a processing volume necessary to execute the task from the task processing volume detection portion 403 in Step S12-20. It should be noted, however, that Step S12-20 is not necessarily performed at this point in time, and it can be performed at any point in time as long as the information about the necessary processing volume of the task becomes necessary.

Please replace paragraph [0118] with the following rewritten paragraph [0118]:

[0118] In subsequent Step S12-9, the timer event registration portion 405 calculates a total necessary processing volume by adding the necessary processing volume of the task to be woken up to the necessary processing volume of the timer event itself. In short, the necessary processing volume of the task is calculated as the processing volume necessary to execute the timer event. In Step S12-10, the timer event registration portion 405 registers the timer event transmitted from the timer event management portion 420 together with the execution time request and the allowable range. The timer event registration portion 405 then notifies the timer event determining portion 406 of information including a total necessary processing volume thus calculated.

Please replace paragraph [0119] with the following rewritten paragraph [0119]:

[0119] In Step S12-11, the timer event determining portion 406 determines execution times in such a manner that a sum of the necessary processing volumes of the respective timer events per unit time becomes as equal as possible to the extent that the time requests and the allowable ranges of the respective timer events are met. In other words, the necessary processing volume of the timer event includes the processing volume necessary for the task because it wakes up the task, and all the processing volumes of the timer events and the tasks woken up by the timer events are therefore made equal in Step S12-11.

Please replace paragraph [0121] with the following rewritten paragraph [0121]:

[0121] An example of an actual application of this embodiment includes management using cues for each time at which the timer event is executed. When the timer event is registered, the cue is recorded together with the execution time, the allowable range, and the necessary processing volume (including that of the task) (Step S12-1 through Step ~~S12-5~~ S12-3 and Steps S12-6 through S12-10). The cue is scanned each time a new timer event is registered, and cues are recombined within the allowable range so that the necessary processing volumes at the respective times become equal to determine the CPU operating frequency at each time (Steps S12-11 and S12-12). The timer events are executed in order of recombined cues (Step S12-13), and the CPU is driven at the operating frequencies determined at the same time at the respective times.

Please replace paragraph [0122] with the following rewritten paragraph [0122]:

[0122] Fig. 13 shows one example of processings performed by the CPU clock control device of this embodiment. As with Fig. 3A1, Fig. 13A1 is a view schematically showing timer events requested to be executed and execution times requested by the timer events, both of which are directly placed on the time axis. Fig. 13A1 shows information notified to the timer event determining portion 406 as the result when Step S12-1 through ~~Step S12-5~~ Step S12-3 and Step S12-6 through Step S12-10 of Fig. 12 are performed.

Please replace paragraph [0151] with the following rewritten paragraph [0151]:

[0151] (6) As has been described, a CPU clock control program of the invention in this application is a CPU clock control program that causes a computer to function as a CPU clock control device that controls a clock of its own CPU, and the CPU clock control program causes the computer as means as follows: program execution time registration means for registering a request for an execution time of a program to be executed by the CPU and an allowable range of the request for the execution time of the program in

correlation with the program; program processing volume detection means for detecting a processing volume necessary to execute the program; program execution time determining means for determining an execution start time and a processing volume per unit time of the program in such a manner that the processing volume detected by the program processing volume detection means is made equal within a specific time range to the extent that the request for the execution time and the allowable range registered in the program execution time registration means are met; CPU operating frequency setting means for determining an operating frequency of the CPU at each time on the basis of the execution start time and the processing volume per unit time of the program determined by the program execution time determining means, and setting the operating frequency in the CPU; and program execution means for making the CPU operating at the operating frequency set by the CPU operating frequency setting means execute the program at the execution start time and the processing volume per unit time determined in the program execution time determining step means.

Please replace paragraph [0153] with the following rewritten paragraph [0153]:

[0153] (7) As has been described, a recording medium of the invention in this application is a computer-readable recording medium having recorded a CPU clock control program that causes a computer to function as a CPU clock control device that controls a clock of its own CPU, and the CPU clock control program causes the computer as means as follows: program execution time registration means for registering a request for an execution time of a program to be executed by the CPU and an allowable range of the request for the execution time of the program in correlation with the program; program processing volume detection means for detecting a processing volume necessary to execute the program; program execution time determining means for determining an execution start time and a processing volume per unit time of the program in such a manner that the processing volume detected by the program processing volume detection means is made equal within a specific time range to the extent that the request for the execution time and the allowable range registered in the program execution time registration means are met; CPU operating frequency setting means for determining an

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operating frequency of the CPU at each time on the basis of the execution start time and the processing volume per unit time of the program determined by the program execution time determining means, and setting the operating frequency in the CPU; and program execution means for making the CPU operating at the operating frequency set by the CPU operating frequency setting means execute the program at the execution start time and the processing volume per unit time determined in the program execution time determining ~~step~~ means.

Please replace paragraph [0155] with the following rewritten paragraph [0155]:

[0155] (8) As has been described, a transmission medium of the invention in this application is a transmission medium holding a CPU clock control program that causes a computer to function as a CPU clock control device that controls a clock of its own CPU, and the CPU clock control program causes the computer as means as follows: program execution time registration means for registering a request for an execution time of a program to be executed by the CPU and an allowable range of the request for the execution time of the program in correlation with the program; program processing volume detection means for detecting a processing volume necessary to execute the program; program execution time determining means for determining an execution start time and a processing volume per unit time of the program in such a manner that the processing volume detected by the program processing volume detection means is made equal within a specific time range to the extent that the request for the execution time and the allowable range registered in the program execution time registration means are met; CPU operating frequency setting means for determining an operating frequency of the CPU at each time on the basis of the execution start time and the processing volume per unit time of the program determined by the program execution time determining means, and setting the operating frequency in the CPU; and program execution means for making the CPU operating at the operating frequency set by the CPU operating frequency setting means execute the program at the execution start time and the processing volume per unit time determined in the program execution time determining ~~step~~ means.

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